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new forms

NEW ANTS OF RARE GENERA AND A NEW GENUS OF PONERINE ANTS

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From collections of ants made by myself in the West Indies and Northern South America, incidental to studies on the biology of fungus-growing ants (Attini),¹ the following remarkable new cerapachyines and ponerines are selected for description.²

All types, except that of *Thaumatomyrmex manni*, are in the author's collection. *T. manni* is in the U. S. National Museum.

The members of the Cerapachyinae constitute a separate subfamily linking the Dorylinae with the Ponerinae and in addition merit special attention because of their rarity and distribution.

The finding of two species of two subgenera of *Cerapachys* adds the continent of South America to the distribution of this widespread but discontinuously distributed genus. Of this genus the late Dr. W. M. Wheeler (1922, p. 53) remarked: "It seems hardly possible that species of *Cerapachys*, *sensu latiore*, are entirely lacking in South America, but none has been found in any of the many extensive collections that have been made on that continent."

Though these ants were taken in Trinidad, this island is only seven miles from the mainland of Venezuela and is South American (Guianan) in all respects rather than West Indian (Lesser Antillean).

Since no specimens of *Cerapachys*, *sensu strictu*, had been found in the New World, the occurrence of a species in Trinidad is of especial note since it reasonably may be considered endemic. It was found in low forest away from cultivations near the famous Pitch Lake in the southwestern part of the island. The few other species are found in Africa, Madagascar, India, and New Guinea.

¹Most of these studies were undertaken while holding a National Research Fellowship in Biology at the Imperial College of Tropical Agriculture, Trinidad, B. W. I.

²Drawings made by Miss Helen Wilson.

The one record of *Cerapachys* (*Syscia*) in the New World is of *Syscia seini* described from Puerto Rico in 1931 by Dr. W. M. Mann,³ who considered it and *S. silvestrii* of Hawaii probably endemic to New Guinea and introduced into these islands. The few other species are recorded from Australia, India, and New Guinea.

The finding of a new species of this subgenus in Trinidad would seem to indicate that perhaps both this subgenus and *C. (Cerapachys)* may be endemic to the New World. They both may be archaic relicts of a formerly world-wide genus.

The two species would seem to have none of the behavior characteristics which enable such introduced ants as *Pheidole megacephala*, *Monomorium pharaonis*, *Tapinoma melanocephalum* and *Paratrechina longicornis* to establish themselves over the warmer parts of the world and even drive out much of the native ant fauna. One of the species was found upon three occasions in two years, but only in a very small area and intensive collecting in many other nearby parts of the island never revealed it.

Three of the rarest genera in the primitive subfamily of ants, the Ponerinae, are the genera *Acanthoponera*, *Thaumatomyrmex*, and *Discothyrea*, each known from but a few specimens of a very few species. All are striking and easily distinguished from other ants. Ants of the genus *Acanthoponera* possess an antennal fossa prolonged backwards over the eyes, epinotal spines or dentations, and usually a petiole terminating in a spine. Ants of the genus *Thaumatomyrmex* are characterized by their narrow, arcuate mandibles with long, spiniform teeth. All of the ants of the genus *Discothyrea* are very small, the worker being only a millimeter or two in length, with the number of its antennal joints reduced to nine or even less, and with the terminal joint comparatively large and ovate.

Aside from their rarity and unusual appearance these ants merit special attention because of their distribution.

Of the ten described species of *Acanthoponera*, including the species here described, seven are found in the Neotropical Region, two in Australia, and one in New Zealand. The neotropical distribution is chiefly in the southern part of South

³The late Dr. W. M. Wheeler (1937, p. 441) overlooked this record when he stated: "This remarkable genus (*Cylindromyrmex*) and the subfamily Cerapachyinae to which it belongs were not previously known to have representatives in the Antilles."

America, in southern Brazil and in Chile, Bolivia, and the Argentine. One variety is recorded from Costa Rica and Mexico, one subspecies from Guatemala, one variety from Panama, and the species here described is from Trinidad. The two subgenera, *Anacanthoponera* and *Acanthoponera* (s. str.) are both found in this region, but only *Anacanthoponera* is recorded from Australia and New Zealand.

Thaumatomyrmex is distinctly a neotropical genus and the three previously recorded species, each known from but two or a very few specimens, are found in Cuba, Honduras, and southern Brazil. The species here described from British Guiana and Trinidad is thus toward the middle of the range.

Discothyrea, like *Acanthoponera*, is found in New Zealand and the Neotropical Region but several species are found in the East Indies, one in Kamerun, and the genotype is supposed to be from "North America," although in the original description no locality is mentioned.

The new genus, *Wadeura*, from the Arawak Indian name for small ponerine ants, is mostly closely related to *Pseudoponera* whose typical subgenus is Indomalayan and whose subgenus *Promyopias* is Ethiopian. Two species in this new genus are here described, one from Panama, the other from the far interior of British Guiana. The *Pseudoponera-Wadeura* group of species include a series ranging from *P. amblyops* (genotype) with long and narrow mandibles bearing seven distinct teeth and very small eyes, through *Wadeura* with mandibular armature reduced to two large and one small teeth and without eyes, to *Promyopias* with nearly edentate mandibles and eyes obsolete or absent.

Cerapachys

Cerapachys (Cerapachys) neotropicus, sp. nov. ✓

(Fig. 1)

Worker.—Length, 3 mm. Head, excluding mandibles, slightly over $1\frac{1}{2}$ as long as wide, rectangular with gently convex sides and transverse occipital margin; anterior clypeal margin gently convex with minute medial tooth; mandibles trigonal with finely and irregularly denticulate cutting margin; frontal carinae in form of close, slightly divergent anteriorly, subvertical lamellae; antennal fossa sub-circular, bounded laterally by distinct carinae; eyes closer to mandibles than to occiput, very small, only slightly convex. Antennae 12-jointed; scapes clavate, all funicular joints transverse except terminal joint. Thorax from

above twice as long as wide; rectangular with slightly convex pronotal margin, slightly impressed laterally in meso-epinotal region and from here posteriorly slightly convex at sides; epinotum convex between the distinct teeth. Petiole from above $1\frac{1}{4}$ longer than wide, quadrangular with posterior corners rounded, posterior margin and sides feebly convex. Postpetiole from above slightly longer than petiole and nearly $1\frac{1}{2}$ times broader, trapezoidal with feebly and irregularly convex sides. Gaster distinctly constricted between first and second segments, the latter distinctly larger than the former. Legs moderately short.

Body shining, with coarse but only moderately abundant setigerous punctations. Legs smooth and shining with very few punctations.

Hairs fine, yellowish white, upright or inclined, limited to punctations on body, more numerous on appendages. Antennal funiculi with sparse, short hairs interspersed with short, appressed pubescence.

Color dark reddish brown, appendages lighter brown.

Described from one worker taken by myself among leaves in low forest near Guapo Bay, Gulf of Paria, Trinidad, B. W. I., April 4, 1935. This locality is near the famous Pitch Lake and the area has an annual rainfall of between 70 and 80 inches. The forest was characterized by the abundance of the cocorite palm (*Maximiliana caribaea*).

Cerapachys (Syscia) ierensis, sp. nov.

Worker.—Length, 2.1–2.2 mm. Head, excluding mandibles, one-seventh longer than broad, rectangular with feebly convex sides rounding into evenly concave occipital margin and feebly convex anterior clypeal margin. Mandibles trigonal with acute apical tooth and finely denticulate cutting margin. Frontal lamina projecting as acute, feebly divergent teeth. Antennal scrobes bordered laterally by strong carinae. Eyes lacking. Antennae 9-jointed; scape strongly clavate, extending slightly more than half-ways to occipital margin; funicular joints 2–7 distinctly broader than long, terminal joint long-elliptical, longer than preceding three joints taken together. Thorax from above sub-rectangular, slightly over twice as long as broad, with convex pronotal margin and sides slightly impressed at meso-epinotal suture; in profile evenly and slightly convex. Epinotal declivity plane, feebly carinate on sides. Petiole from above trapezoidal with feebly convex sides converging anteriorly and convex posterior margin; in profile with rounded dorsum, higher anteriorly, and large ventral lobe produced anteriorly. Postpetiole from above trapezoidal with feebly convex sides converging anteriorly, a little longer than petiole and one-fourth wider; in profile with basal half produced anteriorly as a large lobe and with feebly convex dorsum.

Gaster from above ovate, 1st gastric segment comprising about nine-tenths of gaster. Legs short, with thickened femora and tibiae; basal tibial joint of prothoracic leg equal in length to distal four taken together.

Sub-lucid; with dense and moderately coarse setigerous punctations. Moderately pilose, with fine reclinate to recumbent yellowish white hairs interspersed with much longer, sparser, and more upright hairs. Color uniformly yellowish brown.

Described from a series of workers taken in small tunnels in red clay in the same banana plot at St. Augustine, Trinidad, B. W. I., but in two different years, May 17, 1935, and May 20, 1936. The first year I found them in small tunnels just above the fungus gardens of a nest of *Acromyrmex octospinosus* Reich between four mature banana stalks. The ants were at first thought to be dorylines because they beat their antennae upon the ground before them as they crawled along in single file, precisely as do the army ants. This observation further substantiates the removal of this group of ants from the ponerines to a separate subfamily, the Cerapachyinae. They were not strongly negatively phototropic but "felt" their way cautiously in their tenuous tunnels. One worker was carrying beneath it with ease a larva, fully two-thirds its own length, whose long axis was parallel to that of the ant. When the two were put in alcohol the worker maintained its grip for many seconds. Another larva was resting in an L-shaped position but was soon carried off. A single worker was taken nearby August 3, 1935, among leaves at the base of a saman tree (*Pithecolobium saman*). When the banana plot was revisited in 1936 workers were found at the base of a mature banana clump in small tunnels from near the surface to a depth of at least 12 cm. Brood was found, not in a single brood chamber, but in small pockets off from the tunnels and of only slightly larger dimensions. Their doryline behaviour was again noted.

This species differs from cotypes of *Syscia silvestrii* Wheeler of Hawaii in the Museum of Comparative Zoology in slightly smaller size, shorter antennal scapes, more rounded postpetiole, seen from above, and in paler color. Judging from the description and drawing of *Syscia seini* Mann of Puerto Rico, *ierensis* differs in slightly larger size, longer head and antennal scapes, less impressed sides of thorax, proportionately broader and more convex postpetiole, seen from above, and in other ways. The three species are evidently closely related.

The poetic Indian name for Trinidad is Iere, land of the humming bird.

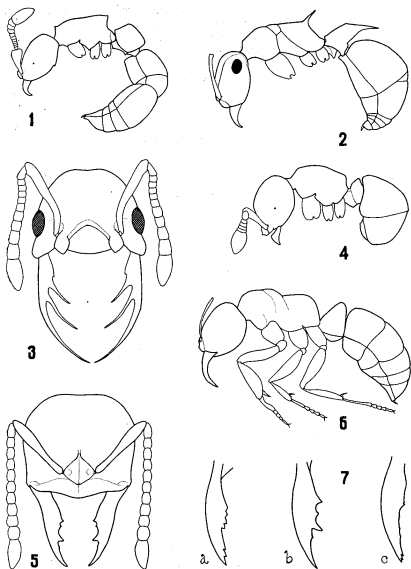


Fig. 1. *Cerapachys* (*Cerapachys*) *neotropicus*, sp. nov. Worker.
 Fig. 2. *Acanthoponera* (*Acanthoponera*) *spininodis*, sp. nov. Worker.
 Fig. 3. *Thaumatomyrmex atrox*, sp. nov. Worker.
 Fig. 4. *Discothyrea denticulata*, sp. nov. Worker.
 Fig. 5. *Wadeura guianensis*, gen. et sp. nov. Worker.
 Fig. 6. *Wadeura guianensis*, gen. et sp. nov. Worker.
 Fig. 7. Mandibles of (a) *Pseudoponera amblyops*, (b) *Wadeura haskinsi*, sp. nov. and (c) *Promyrmecops silvestrii*. (a and c after Emery.)

Acanthoponera***Acanthoponera* (A.) *spininodis*, sp. nov.**

(Fig. 2)

Worker.—Length, 4.2–4.3 mm. Head, excluding mandibles, barely longer than broad in front of eyes. Anterior clypeal margin straight, sides of head in front of eyes convex, occipital angles nearly rectangular, occipital margin slightly concave. Eyes large, convex. Frontal carinae lamellate in front of eyes, gradually decreasing posteriorly into vermiculate rugae. Antennal scrobes extending around posterior corners of head to back of eyes. Antennal scapes not quite extending to occipital margin. Mandibles triangular; with 6–8 irregular teeth. Pronotum from above convex, slightly more than twice as broad as basal surface of epinotum in front of spines, anteromedially produced as low, laterally compressed, truncate tubercle. Thorax in profile slightly impressed at pro-mesonotal and meso-epinotal sutures. Epinotal spines from above diverging, slightly longer than the width of the basal surface in front of them, in profile straight, directed backwards and upwards. Petiole with spine distinctly longer than epinotal spines and forming dorsally an obtuse angle, ventrally a concavity. Gaster ovate. Legs of moderate length.

Sculpturing of head, thorax and petiole coarsely reticulate-rugose; median carina extends length of head over clypeus to occipital margin; proximal two-thirds of petiolar spine sculptured as on petiole. Gaster smooth but for fine setigerous punctations. With moderately abundant fine, upright hairs of moderate length interspersed with more abundant short hairs which on the gaster become a reclinate, silky pubescence.

Color uniformly yellowish-brown.

Described from two workers taken by myself on the summit of El Tucuché (3,072 feet), one of the two highest peaks in Trinidad, B. W. I., December 15, 1934. The ants were taken at about 10 p. m. as they crawled over the leaves of bromeliads growing close to the ground in the dripping wet, mossy rain forest. Tree frogs (*Amphodus auratus*, *Eleutherodactylus urichi*, and *Gastrotheca fitzgeraldi*) were also out on the leaves and snapped up passing ants but the stomachs of those examined did not contain the *Acanthoponeras*.

Of the two known species of the subgenus *Acanthoponera* in the New World with their two varieties and a subspecies, this new species is closest to *goeldii* ssp. *schwarzi* Wheeler which is known from the single worker taken in Guatemala. These are the two smallest forms and are closely related. From *schwarzi* (comparing with the type in the Museum of Comparative Zoology) this new species differs in possessing stouter epinotal spines, less deflected petiolar spine, coarser sculpturing of head and thorax, less pilose head, and in darker color.

Thaumatomyrmex

The five species of *Thaumatomyrmex* may be separated by means of the following key: √

1. Apical teeth of closed mandibles not exceeding lateral margins of head..... 2
- Apical teeth of closed mandibles exceeding lateral margins of head..... 3
2. A basal fourth tooth on mandible lacking. Cuba..... *cochlearis* Creighton
- A basal fourth tooth on mandible present. Brazil..... *mutilatus* Mayr
3. Lateral margins of head strongly diverging anteriorly. Bolivia..... *manni* Weber
- Lateral margins of head moderately divergent..... 4
4. Third tooth, when mandibles closed, barely reaching mid-line of head.
- Honduras..... *ferox* Mann
- Third tooth, when mandibles closed, distinctly exceeding mid-line of head.
- British Guiana and Trinidad..... *atrox* Weber

∫ ***Thaumatomyrmex atrox*, sp. nov.**

(Fig. 3)

Worker.—Length about 4.4 mm. Head, between anterior clypeal margin and occiput, three-fourths as long as wide between outer margins of eyes; anterior and posterior clypeal margins convex; sides of head distinctly converging back of eyes; posterior margin concave, occipital corners smoothly rounded. Mandibles with three long, acute teeth and a rudimentary basal fourth in the form of a flattened, acute tubercle. Antennal scapes curved, distinctly exceeding occiput. Thorax from above with sides of pronotum distinctly more convex and broader than rest of thorax. Petiole from above much broader behind, with transverse posterior margin and sides converging in slight convexity to concave anterior margin. Gaster large, with truncate anterior margin. Legs moderately long and slender.

Body smooth and shining except for fine, short vermiculate impressions resembling a very sparse, appressed pubescence.

Pilosity of very sparse, obtuse and coarse reclinate hairs, most numerous and backwardly directed on gaster, shorter and appressed on appendages, becoming a finer pubescence on antennal tips.

Color shining black with pale brown appendages, including mandibles.

Described from one worker (holotype) taken by myself on Kartabo Point, at the junction of the Mazaruni and Cuyuni Rivers, British Guiana, August 20, 1935, and one worker (metatype) taken by myself in the foothills north of Tunapuna, Trinidad, B. W. I., July 29, 1935. Intensive collecting in both localities failed to reveal other workers and testifies to the extreme rarity of these archaic ants. Both specimens were among leaves and, as there were no land snails in either place, a snail-eating habit could not be inferred (cf. Creighton, 1928). It is more probable that the bizarre mandibles are used for capturing other Arthropods (cf. the myriapod-eating habit of *Emeryella schmitti* discovered by Dr. Mann (Wheeler and Mann, 1914). Similar bizarre mandibles are common in *Strumigenys* and I have found a *Strumigenys* worker carrying

a collembolan (*Entomobrya* sp.), controvening a theory that the ants of this genus fed on fungi.

Of the previously known three species this new species is closest to *T. ferox* discovered by Dr. W. M. Mann in Honduras. It is larger than *cochlearis* or *mutilatus* and smaller than *ferox*. From *cochlearis* it differs further in lacking punctate sculpturing on body and fine ridges radiating back from clypeus, in proportions of thorax and petiole, in more anteriorly diverging head, and in mandibular teeth proportions. A cotype of *ferox* differs from this new species in having the pronotum more convex laterally, in having an even convexity between the pro- and mesonotum, in having the petiole more bi-convex and less plano-convex when viewed laterally, in having distinctly thicker petiole apex, in having a shorter head and in mandibular teeth proportions. Sculpturing and pilosity are similar.

Dr. W. M. Mann kindly allows me to describe a fifth species which he took at Huachi Beni, Bolivia:

✓✓ *Thaumatomyrmex manni* sp. nov.

Worker.—Length about 4 mm. Head with sides strongly diverging anteriorly. Apical tooth, when the mandibles are closed, far exceeding the sides of the head; third tooth slightly exceeding mid-line of head. Meso-epinotal impression distinct. Epinotal declivity plane. Integument smooth. Pilosity sparse. Color black with pale brown mandibular teeth.

Holotype in the U. S. National Museum. Nidotypes were not at the time available for examination. This species is easily separated from the other species by the strongly diverging sides of the head.

Discothyrea ✓✓

The three hitherto known New World species of *Discothyrea* and the three species described below may be separated by means of the following key: ✓✓

1. Antennae nine-jointed. 2
- Antennae seven-jointed. 3
2. Length of female 1.2 mm. Costa Rica. *horni* Menozzi
- Length of female 2 mm., worker 1.5 mm. "North America" *testacea* Roger
3. Clypeal lamina between the antennal bases bearing a denticle, worker 1.0 mm. British Guiana. *denticulata* Weber
- Clypeal lamina not toothed. 4
4. Length of female 1.8 mm. Argentina. *neotropica* Bruch
- Length of female 1.1–1.2 mm. 5
5. Ventral lamina of petiole with right posterior angle, petiole 0.19 mm. high, node of petiole more sharply angulate above, color lighter. Panama, *humilis* Weber
- Ventral lamina of petiole with acute posterior angle, petiole 0.21 mm. high, node of petiole more rounded above, color darker. Trinidad. *icta* Weber

✓✓ *Discothyrea humilis*, sp. nov.

Female (Dealate).—Length, 1.16 mm. Head, excluding mandibles, about one and one-tenth longer than broad back of eyes, evenly rounded, viewed anteriorly, but for feebly concave clypeal margin and slightly flattened occiput; between the antennal bases projects a small triangular plate with rounded apex; eyes large, feebly convex, separated from the mandibular insertions by a distance equal to less than their diameter; ocelli large and prominent; mandibles trigonal with concave masticatory margin bounded apically by a large acute tooth, basally by an acute denticle; antennae 7-jointed, scapes clavate, about three-fifths as long as funiculi, terminal funicular joint 0.17 x 0.10 mm., distinctly longer than remainder of funiculus. Pronotum evenly convex anteriorly. Epinotum distinctly gibbous on each side. Petiole in profile with cuneate node, ventrally with a high rectangular lamina. 1st gastric segment with anterior margin impressed at junction with petiole and sloping downwards and backwards. 2nd gastric segment larger than 1st and overarched the remaining segments; sting fine, short, exserted. Legs small and short.

Surface of body sub-lucid, microscopically reticulate.

Pilosity a fine, whitish, moderately abundant pubescence.

Yellowish-brown.

Described from two dealate females taken by myself June 13 and June 20, 1938, on Barro Colorado Island, Panama Canal Zone. One female was found among decayed leaves and humus on a fallen log, the other in debris swept down by a swollen stream from the forest.

✓✓ *Discothyrea denticulata*, sp. nov.

(Fig. 4)

Worker.—Length, 1.0 mm. Head, excluding mandibles, one-tenth longer than wide; in front view sub-circular in outline with occipital margin transverse in middle; antennae 7-jointed, scapes inserted closely together and separated only by a vertical plate which in side view appears as a forwardly directed rectangular plate bearing an acute tooth in front. Eyes small, situated much closer to mandibular insertions than to occipital angles. Mandibles triangular, edentate. Antennal scapes clavate; funiculi with terminal joint ovate and distinctly longer than remainder of joints taken together. Thorax from above widest in pronotal region with sides converging posteriorly to epinotum. Epinotal spiracles projecting as tubercles; declivous surface of epinotum slightly concave and bordered by feeble, rounded carinae. Petiole from above transversely rectangular with rounded corners. 1st gastric segment from above truncate anteriorly, with rounded corners. Legs of moderate proportions.

Entire surface, including gaster and appendages, dull, finely punctate. Entire surface covered with a microscopically fine and appressed pubescence, without erect hairs.

Color uniformly light brown.

Described from one worker taken by myself in virgin green-heart (*Nectandra Rodei* Schomb.) forest near the Forest Settlement, Mazaruni River, British Guiana, Aug. 23, 1935. The ant was among leaves on the forest floor.⁴

This species differs from *D. horni* Menozzi from Costa Rica and *D. testacea* Roger from "North America" (genotype) in possessing seven instead of nine antennal joints. From the female of *D. neotropica* Bruch of the Argentine this species differs in proportions of antennal joints and in having the plate between the antennal scape bases toothed. Of *neotropica* (known only from the type female) Dr. Bruch writes (Bruch, 1919) "Respecto al número reducido de los artejos antenales en *D. neotropica* (9 en el genotipo), he creído bien consultar al Dr. Santschi de Kairouan. Mi distinguido colega me aconsejó conservar el nombre generico, y opina que la contracción de estos artejos es tal vez inestable, habiéndola observado con *Discothyrea Traegaordhi* Sants., y en una preparación en bálsamo de Canadá, donde no constan sino 6 artejos, los otros todos más o menos soldados e indefinibles." I am therefore leaving this species in the genus *Discothyrea*. The possibility that the genotype, *testacea*, described in 1863 presumably from "North America" and not recorded since, may also show variability in antennal joint number must be entertained. That it cannot be this species is indicated by the size of *testacea* (1.5 mm. for worker, 2 mm. for female), among other differences.

✓✓ *Discothyrea icta*, sp. nov.

Female (Dealate).—Length, 1.2 mm. Head, excluding mandibles, about one and one-seventh times longer than broad back of eyes, with sides convex, rounding smoothly into convex occipital corners, occipital margin transverse, anterior clypeal margin smoothly impressed medially; between bases of antennae, is a laterally compressed, acute tooth, curved posteriorly, and convex anteriorly; eyes large, feebly convex, separated from the mandibular insertions by a distance equal to less than their diameter; ocelli large and prominent; mandibles trigonal, terminating in acute apical tooth, cutting margin proximally with a much smaller, acute tooth; antennae 7-jointed, scapes clavate, three-fifths as long as funiculi; terminal joint 0.18 x .09 mm., slightly longer than remainder of funicular joints taken together. Thorax from above rectangular, broader through pronotum than through epinotum, the latter deeply and broadly impressed posteriorly, thus forming distinct and projecting rounded angles. Petiole in profile with cuneate node rounded at apex, ventrum with large lamella convex

⁴A second specimen (metatype) was taken by myself twenty-two and one-half miles west of Kartabo Point, British Guiana, September 8, 1935.

in front, slightly concave behind, the two surfaces forming a right angle. 1st gastric segment with anterior vertical face impressed at junction with petiole; 2nd gastric segment larger than 1st, the remaining segments largely retracted beneath 2nd; sting fine, short, exerted. Legs small, moderately short.

Surface of body sub-lucid, smooth but for microscopic punctations.

Pilosity of fine, whitish, appressed pubescence.

Light yellowish brown, eyes and ocellar bases black.

Described from two dealate females taken by myself under leaves at the base of a saman tree (*Pithecolobium saman*) on the grounds of the Imperial College of Tropical Agriculture, St. Augustine, Trinidad, B. W. I., August 3, 1935.

This species is much smaller than the female genotype, *D. testacea*, or the female of Dr. Bruch's species, *D. neotropica*. From *neotropica* it differs further in having a differently shaped projection (frontal carinae) between the antennal bases, in shape of petiole, including the ventral projection, and in relative proportions of the gastric segments. From the worker of *D. denticulata*, sp. nov. the females differ in the shape of the projection between the antennal bases, in proportions of antennal terminal joint, in shape of petiole, including the ventral projection, and in proportions of gastric segments.

Wadeura

✓✓ *Wadeura*, gen. nov.

Worker.—Size moderate. Head quadrangular, with rounded occipital corners and impressed occipital margin; eyes absent; clypeus convex in middle; antennae 12-jointed, slender, scapes not reaching occipital margin; mandibles long and narrow with sinuate outer margin, slender, acute apical tooth, and two distinct pre-apical teeth with smaller tooth between the latter. Thorax with higher, convex promesonotal region and lower, more plane epinotum, the latter laterally compressed and without carinae or teeth. Petiole rounded-cuneate, ventrum convex, not dentate. Gaster of moderate proportions with distinct impressions at sutures, sting projecting. Legs moderately short; middle and hind tibiae with two spurs, the outer being simple and small, the inner large and pectinate.

Sculpturing fine, without coarse punctations or rugae.

Pilosity of fine, dense pubescence and sparse, fine, upright hairs.

Color light brown.

Female.—Slightly larger than worker. Winged.

Genotype: *Wadeura guianensis*, sp. nov.

Wadeura is close to *Pseudoponera* of the Indomalayan and Ethiopian regions, to which it runs in the late Dr. Wheeler's key.

It is separated by the absence of eyes and nature of mandibular teeth. Of the two subgenotypes of *Pseudoponera*, *P. amblyops* Emery and *Promyopias silvestrii* Santschi, *Wadeura guianensis* comes closer to *amblyops* in mandibular structure but lacks the well-formed eyes; it comes closer to *silvestrii* in reduction of eyes. *P. silvestrii* was originally described as a subgenus of *Myopias* but may deserve to rank as a distinct genus. The three could then be grouped as follows: *Pseudoponera* (Indomalayan)—*Wadeura* (Neotropical)—*Promyopias* (Ethiopian) (Fig. 7a-c).

✓ / *Wadeura guianensis*, gen. et sp. nov.
(Figs. 5 and 6)

Worker.—Length, 4.1 mm. Head, excluding mandibles, barely wider than long, roughly quadrangular with rounded corners and feebly concave occipital margin, eyes absent; clypeus obtusely angulate, produced posteriorly as a slight, rounded gibbosity; antennae 12-jointed, antennal scapes curved towards the head, clavate, not quite reaching occipital margin, joints 1-5 of funiculus distinctly longer than broad, 2nd joint as long or longer than 3rd, joints 6-10 nearly as broad as long; mandibles long and narrow, terminating in a slender, acute tooth, their outer margin feebly sinuate, their inner margin on the distal three-fifths armed with two large but obtuse teeth with a much smaller tooth between; near the base and distal to the subapical tooth a slight rounded tubercle suggests a rudimentary tooth. Pronotum from above lunate, with backwardly directed horns, distinctly wider than mesonotum and about one and one-half times as wide as epinotum; pro-mesonotal impression not distinct; meso-epinotal suture laterally impressed; basal (dorsal) surface of epinotum straight and distinctly lower than thorax, with rounded angles. Petiole cuneiform with rounded apex and a nearly vertical posterior surface, from above transversely trapezoidal with rounded angles. 1st gastric segment from above broader than long, 2nd gastric segment one and three-fourths times broader than long and distinctly the widest segment. Legs of moderate proportions.

Integument feebly shining. Head densely and finely reticulate, thorax, gaster, and appendages with shallow and sparse setigerous punctations which are coarsest on the antennal scapes; mandibles shining with sparse setigerous punctations.

Pilosity of long, fine and upright hairs, sparsest on posterior part of head and on thorax, and moderately abundant appressed pubescence which is thickest on head and appendages.

Color yellowish brown with golden-yellow pilosity.

Described from one worker taken by myself Aug. 2, 1936, near the Oronoque River of the Courantyne River basin in British Guiana in about Latitude 2° 42' North. A small colony consisting of a half dozen workers, a queen and larvae was found a few centimeters down in sandy loam in high rain forest with

many Brazil-nut trees (*Bertholletia excelsa* or *nobilis*). The nest was in the form of irregular chambers. The queen had a larger thorax than the workers and had evidently borne wings. The entire colony was gathered and the worker here described was preserved. The remainder of the colony with queen and brood was taken by airplane and steamer to New York safely alive. Here they were turned over to Dr. Caryl P. Haskins for study but during his unavoidable absence at one time the entire colony died and was lost.

// *Wadeura haskinsi*, sp. nov.

(Fig. 7, b)

Worker.—Length, 4.4–4.6 mm. Head, excluding mandibles, distinctly longer than broad, roughly quadrangular with rounded corners and slightly impressed occipital margin. Antennal scapes failing to reach occipital margin by a distance greater than their distal diameter; 2nd joint of funiculus shorter than third; mandibles long and narrow, terminating in a slender, acute tooth, their outer margin feebly sinuate, their inner margin on the distal three-fifths with two large, stout, and blunt teeth, of which the more distal is larger, and a small median tooth between them; between the apical and the sub-apical tooth a slight rounded tubercle suggests a rudimentary tooth. Thorax in profile with distinct pro-mesonotal impression.

Other characters as in *W. guianensis*.

Described from three workers taken by my friend, Dr. Caryl Parker Haskins, who found these ants upon several occasions on Barro Colorado Island, Canal Zone and who successfully brought parts of colonies to the United States for study.

This species is close to *W. guianensis* but differs in larger size, mandibular tooth structure, shorter antennal scape, shorter 2nd joint of funiculus, and more distinct pro-mesonotal impression.

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